

We Claim:

1. A marker for diagnosis of pancreatic cancer comprising at least one polypeptide selected from the group consisting of the polypeptides having SEQ ID NO:1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, and 55.
2. The marker of claim 1 wherein the group from which at least one polypeptide is selected consists of the polypeptides having SEQ ID NO: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, and 49.
3. An in vitro method for the diagnosis of pancreatic cancer and/or the susceptibility to pancreatic cancer comprising the steps of
  - a) obtaining a biological sample; and
  - b) detecting and/or measuring the increase of the marker of claim 1.
4. The in vitro method of claim 3, wherein the marker comprises at least two polypeptides.
5. The in vitro method of claim 3 wherein said biological sample is derived from the group consisting of serum, plasma, pancreatic juice and cells of pancreatic tissue.
6. An in vitro method for the diagnosis of pancreatic cancer and/or the susceptibility to pancreatic cancer comprising the steps of
  - a) obtaining a biological sample; and
  - b) detecting and/or measuring the increase of at least one nucleic acid coding for the marker of claim 1.
7. The in vitro method of claim 6, wherein said nucleic acid molecule is RNA or DNA.
8. The in vitro method of claim 7, wherein said DNA is a cDNA.

9. The in vitro method of claim 6, wherein the expression levels of at least one of said nucleic acids in an individual suspected to suffer from pancreatic cancer and/or to be susceptible to pancreatic cancer is compared to the expression levels of the same nucleic acids in a healthy individual.
10. The in vitro method of claim 3, wherein the expression level of said marker in an individual suspected to suffer from pancreatic cancer and/or to be susceptible to pancreatic cancer is compared to the expression levels of the same marker in a healthy individual.
11. The in vitro method of claim 6, wherein the expression level of said marker in an individual suspected to suffer from pancreatic cancer and/or to be susceptible to pancreatic cancer is compared to the expression levels of the same marker in a healthy individual.
12. The in vitro method of claim 11, wherein an increase of the expression levels of said marker is indicative of pancreatic cancer or the susceptibility to pancreatic cancer.
13. A screening method for identifying and/or obtaining a compound which interacts with at least one polypeptide having a SEQ ID NO: selected from the group consisting of SEQ ID NO: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, and 55, whose expression is upregulated in pancreatic cancer, comprising the steps of
- a) contacting said polypeptide with a compound or a plurality of compounds under conditions which allow interaction of said compound with said polypeptide; and
  - b) detecting the interaction between said compound or plurality of compounds with said polypeptide.
14. A screening method for identifying and/or obtaining a compound which is an inhibitor or an antagonist of at least one polypeptide having a SEQ ID NO: selected from the group consisting of SEQ ID NO: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, and 55, whose expression is upregulated in pancreatic cancer, comprising the steps of

- a) contacting a said polypeptide with a compound identified and/or obtained by the screening method of claim 13 under conditions which allow interaction of said compound with said polypeptide;
- b) determining the activity of said polypeptide;
- c) determining the activity of said polypeptide expressed in the host as defined in (a), which has not been contacted with said compound; and
- d) quantitatively relating the activity as determined in (b) and (c), wherein a decreased activity determined in (b) in comparison to (c) is indicative for an inhibitor or antagonist.

15. A screening method for identifying and/or obtaining a compound which is an inhibitor of the expression of a polypeptide having a SEQ ID NO: selected from the group consisting of SEQ ID NO: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, and 55, whose expression is upregulated in pancreatic cancer, comprising the steps of

- a) contacting a host which expresses said polypeptide with a compound,
- b) determining the expression level and/or activity of said polypeptide;
- c) determining the expression level and/or activity of said polypeptide in the host as defined in (a), which has not been contacted with said compound; and
- d) quantitatively relating the expression level of said polypeptide as determined in (b) and (c), wherein a decreased expression level determined in (b) in comparison to (c) is indicative for an inhibitor of the expression of said polypeptide.

16. Antibodies against at least one polypeptide having a SEQ ID NO: selected from the group consisting of SEQ ID NO: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, and 55, or antigen-binding fragments thereof, for the use in an in vitro method for the diagnosis of pancreatic cancer.

17. A kit for the diagnosis of pancreatic cancer comprising one or more of the antibodies, or antigen-binding fragments thereof, of claim 16.

18. A kit for the diagnosis of pancreatic cancer comprising one or more of the nucleic acids coding for the marker of claim 1.

19. A kit for screening of compounds that activate or inhibit any of the polypeptides having a SEQ ID NO: selected from the group consisting of SEQ ID NO: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, and 55, or stimulate or inhibit the expression of any of said polypeptides.

20. A marker for diagnosis of pancreatic cancer comprising at least one polypeptide selected from the group consisting of the polypeptides having SEQ ID NO: 56, 7, 5, 9, 19, 12, 15, 50, 21, 57, 23, 3, 33, 52, 39, 26, 10, 8, 14, 32, 1, 4, 35, 59, 40, 22, 45, 20, 60, 36, 2, 42, 34, 24, 37, 16, 31, 61, 13, 62, 38, 47, 55, 25, 43, 27, 63, 41, 51, 17, 49, 30, 11, 48, 64, 18, 44, 65, 46, 28, 66, 67, 29, 53, 6, 54, 68 and 69.

21. The marker of claim 20, wherein said at least one polypeptide does not include SEQ ID NO.s 25, 50, 51, 52, 53, 54 and 55.

22. The marker according to claim 20, additionally comprising at least one of the polypeptides having SEQ ID NO: 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109 and 110.

23. An in vitro method for the diagnosis of pancreatic cancer and/or the susceptibility to pancreatic cancer comprising the steps of

- a) obtaining a biological sample; and
- b) detecting and/or measuring the increase of at least one of the polypeptides listed having SEQ ID NO: 56, 7, 5, 9, 19, 12, 15, 50, 21, 57, 23, 3, 33, 52, 39, 26, 10, 8, 14, 32, 1, 4, 35, 59, 40, 22, 45, 20, 60, 36, 2, 42, 34, 24, 37, 16, 31, 61, 13, 62, 38, 47, 55, 25, 43, 27, 63, 41, 51, 17, 49, 30, 11, 48, 64, 18, 44, 65, 46, 28, 66, 67, 29, 53, 6, 54, 68 and 69.

24. The in vitro method of claim 23, additionally comprising the step of detecting and/or measuring the decrease of at least one of the polypeptides having SEQ ID NO: 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109 and 110.
25. The in vitro method of claim 23, wherein said at least one polypeptide does not include SEQ ID NO.s 25, 50, 51, 52, 53, 54 and 55.
26. The in vitro method of claim 23, wherein said biological sample is derived from the group consisting of serum, plasma, pancreatic juice and cells of pancreatic tissue.
27. An in vitro method for the diagnosis of pancreatic cancer and/or the susceptibility to pancreatic cancer comprising the steps of
- a) obtaining a biological sample; and
  - b) detecting and/or measuring the increase of at least one nucleic acid coding for the marker of claim 23.
28. The in vitro method of claim 27, wherein said nucleic acid molecule is RNA or DNA.
29. The in vitro method of claim 28, wherein said DNA is a cDNA.
30. The in vitro method of claim 27, wherein the expression levels of at least one of said nucleic acids in an individual suspected to suffer from pancreatic cancer and/or to be susceptible to pancreatic cancer is compared to the expression levels of the same nucleic acids in a healthy individual.
31. The in vitro method of claim 27, wherein the expression level of said marker in an individual suspected to suffer from pancreatic cancer and/or to be susceptible to pancreatic cancer is compared to the expression levels of the same marker in a healthy individual.
32. The in vitro method of claim 31, wherein an increase of the expression levels of said marker is indicative of pancreatic cancer or the susceptibility to pancreatic cancer.

33. A screening method for identifying and/or obtaining a compound which interacts with a polypeptide selected from the group consisting of the polypeptides having SEQ ID NO: 56, 7, 5, 9, 19, 12, 15, 50, 21, 57, 23, 3, 33, 52, 39, 26, 10, 8, 14, 32, 1, 4, 35, 59, 40, 22, 45, 20, 60, 36, 2, 42, 34, 24, 37, 16, 31, 61, 13, 62, 38, 47, 55, 25, 43, 27, 63, 41, 51, 17, 49, 30, 11, 48, 64, 18, 44, 65, 46, 28, 66, 67, 29, 53, 6, 54, 68 and 69, whose expression is upregulated in pancreatic cancer, comprising the steps of

- a) contacting said polypeptide with a compound or a plurality of compounds under conditions which allow interaction of said compound with said polypeptide; and
- b) detecting the interaction between said compound or plurality of compounds with said polypeptide.

34. A screening method for identifying and/or obtaining a compound which is an inhibitor or an antagonist of a polypeptide listed in table 6 whose expression is upregulated in pancreatic cancer, comprising the steps of

- a) contacting said polypeptide with a compound identified and/or obtained by the screening method of claim 33 under conditions which allow interaction of said compound with said polypeptide;
- b) determining the activity of said polypeptide;
- c) determining the activity of said polypeptide expressed in the host as defined in (a), which has not been contacted with said compound; and
- d) quantitatively relating the activity as determined in (b) and (c), wherein a decreased activity determined in (b) in comparison to (c) is indicative for an inhibitor or antagonist.

35. A screening method for identifying and/or obtaining a compound which is an inhibitor of the expression of a polypeptide selected from the group consisting of the polypeptides having SEQ ID NO: 56, 7, 5, 9, 19, 12, 15, 50, 21, 57, 23, 3, 33, 52, 39, 26, 10, 8, 14, 32, 1, 4, 35, 59, 40, 22, 45, 20, 60, 36, 2, 42, 34, 24, 37, 16, 31, 61, 13, 62, 38, 47, 55, 25, 43, 27, 63, 41, 51, 17, 49, 30, 11, 48, 64, 18, 44, 65, 46, 28, 66, 67, 29, 53, 6, 54, 68 and 69, whose expression is upregulated in pancreatic cancer, comprising the steps of

- a) contacting a host which expresses said polypeptide with a compound,
- b) determining the expression level and/or activity of said polypeptide;

- c) determining the expression level and/or activity of said polypeptide in the host as defined in (a), which has not been contacted with said compound; and
- d) quantitatively relating the expression level of said polypeptide as determined in (b) and (c), wherein a decreased expression level determined in (b) in comparison to (c) is indicative for an inhibitor of the expression of said polypeptide.

36. Antibodies against the proteins having SEQ ID NO: 56, 7, 5, 9, 19, 12, 15, 50, 21, 57, 23, 3, 33, 52, 39, 26, 10, 8, 14, 32, 1, 4, 35, 59, 40, 22, 45, 20, 60, 36, 2, 42, 34, 24, 37, 16, 31, 61, 13, 62, 38, 47, 55, 25, 43, 27, 63, 41, 51, 17, 49, 30, 11, 48, 64, 18, 44, 65, 46, 28, 66, 67, 29, 53, 6, 54, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109 and 110, or antigen-binding fragments thereof, for the use in an in vitro method for the diagnosis of pancreatic cancer.

37. A kit for the diagnosis of pancreatic cancer comprising one or more of the antibodies, or antigen-binding fragments thereof, of claim 36.

38. A kit for the diagnosis of pancreatic cancer comprising one or more of the nucleic acids coding for the marker of claim 20.

39. A kit for screening of compounds that activate or inhibit any of the polypeptides having SEQ ID NO: 56, 7, 5, 9, 19, 12, 15, 50, 21, 57, 23, 3, 33, 52, 39, 26, 10, 8, 14, 32, 1, 4, 35, 59, 40, 22, 45, 20, 60, 36, 2, 42, 34, 24, 37, 16, 31, 61, 13, 62, 38, 47, 55, 25, 43, 27, 63, 41, 51, 17, 49, 30, 11, 48, 64, 18, 44, 65, 46, 28, 66, 67, 29, 53, 6, 54, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109 and 110, or stimulate or inhibit the expression of any of said polypeptides.

40. The kit of claim 39, wherein said polypeptides are the polypeptides selected from the group consisting of SEQ ID NO: 56, 7, 5, 9, 19, 12, 15, 50, 21, 57, 23, 3, 33, 52, 39, 26, 10, 8, 14, 32, 1, 4, 35, 59, 40, 22, 45, 20, 60, 36, 2, 42, 34, 24, 37, 16, 31, 61, 13, 62, 38, 47, 55, 25, 43, 27, 63, 41, 51, 17, 49, 30, 11, 48, 64, 18, 44, 65, 46, 28, 66, 67, 29, 53, 6, 54, 68 and 69.